

Piston Vacuum Pump

ABSTRACT

A piston vacuum pump comprises a cylinder (14) and a piston (12) that forms a compression chamber (28) with the cylinder (14). The piston (12) oscillates in the cylinder (14) with a compression stroke and an intake stroke. In a side wall (16) of the cylinder (14), a gas inlet (30) is provided, the gas inlet (30) being closed by the piston (12) at the beginning of the intake stroke and open at the end of the intake stroke. Further, an equalizing conduit and a valve are provided through which gas from the gas inlet (30) flows into the compression chamber (28) at the beginning of the intake stroke. This provides a simple arrangement of an equalizing conduit with a valve. The piston substantially forms the equalizing conduit and the valve. Thereby, the valve can act in the region of the piston end wall so that the dead volume is minimized.